

## SUBPICTURE DECODING ARCHITECTURE AND METHOD

### ABSTRACT OF THE DISCLOSURE

In a system for processing and displaying a DVD-video data stream, a system for decoding and processing a subpicture data stream. The subpicture data stream comprises a subpicture pixel data stream and a subpicture display control data stream. The subpicture display control data stream preferably comprises one or more display control commands, one or more of which include subpicture display control information. The system comprises at least one processing unit for processing software programmed to perform at least some subpicture data stream decoding and subpicture display control command execution. In addition, the system further comprises a subpicture hardware unit configured to receive the subpicture pixel data stream, subpicture control information extracted from a subpicture display control command executed by said at least one processing unit, and subpicture display control commands not executed by said at least one processing unit. After receiving the information, the subpicture hardware unit generates subpicture display information, which is presented to a DVD video display unit. The subpicture display information preferably comprises pixel color and contrast information.

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